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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,576	06/25/2003	Michael J. Hier	1-73893	3331

27377 7590 04/01/2005

MACMILLAN, SOBANSKI & TODD, LLC  
ONE MARITIME PLAZA-FOURTH FLOOR  
720 WATER STREET  
TOLEDO, OH 43604

EXAMINER

DUNN, DAVID R

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/603,576

Applicant(s)

HIER ET AL.

Examiner

David Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/18/04, 9/29/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements filed September 29, 2003 and October 18, 2004 are acknowledged. See enclosed IDS forms.

### *Specification*

2. The disclosure is objected to because of the following informalities: on page 6, line 26, "interior of the beam 17" should be --interior 27 of the beam 16--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not discuss the inflator assembly including "compressed gas". The disclosure does not describe how the cross beam would hold compressed gas or how it would be released.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5, 6, and 8-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is indefinite as it recites “an inflatable air bag”; it is unclear if this is the same as “an air bag” that was previously recited in claim 1. Similarly, claim 15 also recites “an inflatable air bag”.

Claims 8-16 recite the limitation "said cross beam". There is insufficient antecedent basis for this limitation in the claim. It is noted that claim 1 recites “[a] cross beam assembly” and “a beam”, however “a cross beam” is never recited.

#### *Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 5-9, 12-17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,227,212 (cited in IDS).

GB 2, 227, 212 discloses a cross beam assembly extending between side frame members of a vehicle, the assembly comprising: a beam (7) having a hollow interior, the beam defining an opening (7a); and an air bag inflator (10) assembly including a source of pressurized gas for

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inflating an airbag (12), the inflator being disposed within the interior of the beam (see Figure 1) such that activation of the inflator expels gas through the opening (see page 5, lines 8-15).

The beam has a generally constant cross-sectional area along the entire length (see Figure 2). The air bag is disposed outside the interior of the beam (see Figure 1). The inflator includes a separate canister housing (10b) with apertures (10a).

GB 2, 227, 212 also discloses the inflator assembly being integrally formed in the cross beam such that a portion of the cross beam defines walls of the inflator (see Figure 4); the cross beam includes a pair of walls defining the housing of the propellant (see Figure 4, the end walls of inflator 10).

The assembly includes a chute (11) attached to the cross beam and partially surrounding the cross beam. The chute includes the airbag being spaced from the cross beam. Regarding claim 17, the assembly inherently has a door for covering the airbag which inherently moves to a deployed position. The source of pressurized gas is a solid propellant (see page 4, line 24).

9. Claims 1-6, 8-10, and 12-19 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2,704,510 (cited in IDS).

FR 2,704,510 discloses a cross beam assembly extending between side frame members of a vehicle, the assembly comprising: a beam (7) having a hollow interior, the beam defining an opening (16); and an air bag inflator (13) assembly including a source of pressurized gas for inflating an airbag (15), the inflator being disposed within the interior of the beam (see Figure 6) such that activation of the inflator expels gas through the opening.

The beam has a generally constant cross-sectional area along the entire length (see Figure 2). The beam includes a strengthening member attached adjacent to the inflator assembly (see

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walls parallel to beam 7; Figure 4). The air bag is disposed outside the interior of the beam (see Figure 6). The inflator is integral with the cross beam with a pair of side walls (17, 18) attached by a crimp (see bends in beam 7, Figure 4). The assembly includes a chute (see Figures 3 and 6) including a door (Figure 3).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,227,212 in view of Storey et al. (5,588,670).

GB 2,227,212 is discussed above and does not show the end walls welded or the inflator including compressed gas.

Storey et al. teaches a structural pressure vessel for an airbag which comprises compressed gas (see column 2, line 10-20). Storey et al. also notes the use of welding in such an inflator (see column 2, lines 35-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify GB 2,227,212 with the teachings of Storey et al. to include an inflator using compressed gas in order to provide a reliable source of inflation fluid.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify GB 2,227,212 with the teachings of Storey et al. to weld the end walls to

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the cross beam as is old and well known in the art in order to provide a secure method of attaching the walls.

*Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Knight, IV et al. shows a cross beam and inflator diffuser of interest.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. After April 6, 2005, the examiner's new phone number will be 571-272-6670.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Dunn  
Primary Examiner  
Art Unit 3616